RESEARCH ARTICLE







Are mothers under lunchbox pressure? An exploration of the experiences of Victorian mothers preparing lunchboxes for their children

Kimberley Watson-Mackie 1 Hayley McKenzie 1,2 Fiona McKay 1,2 I

Correspondence

Kimberley Watson-Mackie. School of Health and Social Development, Faculty of Health. Deakin University, Burwood, VIC 3220, Australia

Email: kwatsonm@deakin.edu.au

Funding information Deakin University

Handling editor: Annabelle Wilson

Abstract

Issue Addressed: A healthy diet is particularly important during childhood. Research suggests that more than 95% of Australian primary school aged children do not eat a diet consistent with the Australian Dietary Guidelines, putting them at risk of poor health. Interventions to improve the quality of children's lunchboxes may help address this issue. However, there is limited understanding of the factors impacting lunchbox preparation.

Methods: This study explored the experiences of 10 mothers of Victorian primary school students. Mothers took part in semi-structured interviews exploring their views on lunchbox preparation and food choices. The study used a Constructivist Grounded Theory methodology and data were analysed using an inductive, thematic approach.

Results: Analysis of the interviews yielded four main themes. (i) Mothers experienced a range of non-nutritional barriers that impacted the food choices they made for their children. (ii) Children's preferences influenced parental food choices. (iii) Mothers experienced and/or perceived judgement about the food choices they make for their children. And (iv) Mothers identified a lack of support and information from schools about what was appropriate for school lunch.

Conclusion: Findings of this study indicate that mothers are concerned with balancing nutrition and child preferences within the broader context of guidelines, perceived or real judgement and income constraints.

So What?: The school environment may be an ideal setting to promote healthy eating but support for parents is needed. This is the first study in Victoria exploring mothers' perspectives on lunchbox preparation and provides initial information on which future research can build.

KEYWORDS

Australian, children, healthy, lunch, nutrition, parent, school

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 The Authors. Health Promotion Journal of Australia published by John Wiley & Sons Australia, Ltd on behalf of Australian Health Promotion Association.

¹School of Health and Social Development, Faculty of Health, Deakin University, Burwood, Victoria, Australia

²Institute for Health Transformation, Deakin University, Burwood, Victoria, Australia



1 | INTRODUCTION

A diet that meets the Australian Dietary Guidelines can promote general health and reduce the risk of developing chronic health conditions. Children need a nutritious diet to maintain their health and wellbeing and develop healthy behaviours they can take into adulthood. However, research has found that over 95% of Australian primary school aged children do not consume an adequately nutritious diet, putting them at risk poor health outcomes including excess weight gain, poor mental health, reduced academic performance and the development of noncommunicable diseases later in life.

Australian children spend most of their time outside the home at school, making school an ideal setting for health promotion. To assist parents in making healthy food choices, policymakers have developed school-based healthy eating guidelines, with this information often being provided to parents by their schools.⁴ This information generally focuses on educating parents on nutrition and providing healthy lunch-box ideas.⁵⁻⁷ However, research indicates that parents already feel confident in their nutritional knowledge, and this focus on education ignores the complexity of parent's experiences providing healthy food for their children.⁵⁻⁸ Parent's report that their food choices often reflect a compromise between food they consider nutritious and non-nutritional barriers related to time pressures, costs and adhering to child preferences.^{5,8} As such, the focus on increasing nutritional knowledge of parents may be misplaced when seeking to improve child nutrition.^{5,8}

Previous research exploring school lunchboxes has focused on the types of food children bring to school.^{9,10} However, there has been little research exploring parental perceptions of lunchbox preparation, or their experiences when seeking to balance their own nutritional knowledge and other mitigating factors that impact lunchbox choices. 9,10 This leaves a clear gap in the knowledge surrounding the possible drivers for improved lunchbox quality. 9,10 Hay's concept of "good mothering" can be used to explore the social pressures related to mothering and how these social pressures impact parental food choices. 11,12 Children's dietary intake is intrinsically linked to the concept of good mothering, as mothers are often responsible for preparing family meals. 11,12 Good mothering is defined as the social expectation that mothers are fully accountable for their children's health and wellbeing. 11,12 The focus on mothers specifically highlights the traditional gender roles that have been associated with parenting. 11,12 While society is changing and many families are moving away from traditional gender divides, differences remain in the demands and expectations of parents based on their gender. 13,14 Faircloth, 11 noted that the push for fathers to be more involved in childcare has focused on the "caring about" responsibilities, such as supporting sport or school activities. This is in contrast to mothers, who are expected to focus on the "caring for" responsibilities, which includes child nutrition and is still viewed as one of the most critical aspects of motherhood. Current literature suggests that health promotion interventions seeking to improve children's dietary intake are primarily focused on mothers, 11,15 which reinforce gendered expectations.

School lunchboxes can be considered a public example of good mothering. 7,15,16 When considering child nutrition, according to

Harman and Cappellini^{7,17} and Pike and Leahy, ¹⁶ society perceives parents as caring or uncaring based upon the assumed nutritional quality of the food in their children's lunchbox, while potential barriers experienced by some parents that could impact lunchbox food choices are not considered. 16,18 Maher et al, 15 interviewed 24 mothers about their views on child nutrition guidelines and how they related to their own experiences feeding their children. 15 The findings indicated that mothers experience an intermingling of responsibility and resistance to health promotion information, especially if they considered the information judgmental or impractical. 15 This means that focusing on parental nutritional education may be ineffective, and may also have a negative impact on mothers emotional and mental wellbeing. 13,19 According to Henderson et al, 13 guilt and "mother-blame" are everpresent and an inescapable part of motherhood, and are said to impact all mothers regardless of their employment, socio-economic status and personal beliefs around traditional gender roles. To date, there is limited data on the impact good mothering has on parent's lunchbox choices or their perspectives of lunchbox preparation. 5,11,15

Data on the experiences of mothers when preparing lunchboxes for their children is limited, and currently, no qualitative studies have explored the perspectives of mothers in Victoria. This research begins to address these gaps by exploring mothers' perspectives on lunchbox preparation and children's dietary intake at primary school. Specifically, the aim of this study was to explore parental experiences of packing lunchboxes for their children, information schools provide on lunchbox preparation and consider the potential barriers some mothers experienced that impacted their ability to pack lunchboxes they consider healthy.

2 | METHODS

2.1 | Design

This study employed a qualitative design to investigate the aims using semi-structured interviews. This research was guided by a Constructivist Grounded Theory (CGT) methodology, a sociological approach to qualitative research in which researchers acknowledge their own beliefs around the topic of investigation and how it may influence the research process.²⁰ The researchers co-construct the data with the participants, data collection and analysis is conducted simultaneously to develop a theory that is a subjective interpretation of the participants experiences rather than an objective representation.²⁰

2.2 | Sample

Data were collected between July and September 2021. While the study was open to any parent or caregiver of children who attended primary school in Victoria to maximise the participant variation, the researchers were only contacted by mothers. This was expected as current literature suggests child feeding is considered a primary role of the mother. 11,15

2.3 | Recruitment

Participants were recruited through primary schools and community organisations, social media and snowball sampling. Schools and community groups were emailed an advertisement flyer that included a short summary of the project and the contact information for the senior author, who parents then contacted to express their interest. The first author emailed potential participants the plain language statement (PLS) and consent form. Potential participants who expressed interest but did not return the consent forms were followed up via two emails over a three-week period. Those who did not respond were classed as no longer interested and no further communications were sent. Informed written and verbal consent was obtained prior to interviews being conducted. There was no pre-existing relationship between the researchers and the participants prior to the interviews being conducted. Participants were not provided any additional information about the nature of the interview beyond what was included in the advertising flyer and PLS. Participants were given a \$25 gift card as a reimbursement for their time which had been advertised in the recruitment flyer.

2.4 Data collection

Data were collected via semi-structured interviews, three were conducted on Zoom and seven by phone. An interview guide was developed by the research team based on the aims of the study. The guide consisted of five questions; "Can you tell me about yourself and your family?" "Can you tell me about a typical week of preparing school lunch boxes for your children?" "Do you experience any challenges or feel pressure with packing your child's lunch box?" "Can you tell me about the information you receive from the school about guidelines for lunch boxes and healthy eating?" and "Do you use social media to get lunchbox ideas?" as well as follow-up probing questions.

The CGT methodology and previously conducted research were used to guide the question design and interview format. 5.7,21 The interviews were recorded and transcribed verbatim. The transcripts were sent to the participants for member-checking prior to data analysis. All the participants reported the transcripts were representative of their interview and no modifications were required. The average interview duration was 36 minutes (range 28-52) and no follow-up interviews were conducted. The sample size was considered adequate for a CGT methodology, consistent with previous research 22,23 and given that no new themes were identified in the last three interviews. 20

2.5 | Data analysis

Interview transcripts were analysed using NVivo (Version 12) software. Analysis began as soon as the transcripts became available as CGT methodology conducts data collection and analysis simultaneously. An inductive approach was applied, consisting of line by line coding, initial coding and focused coding to develop a list of key themes.²⁰ These themes were reanalysed and discussed by the research team to ensure their relevance to

the research questions, with any remaining themes either removed or incorporated into one of the main themes through discussion.

3 | RESULTS

3.1 | Characteristics of the sample

Ten Victorian mothers consented to participate in the research and were interviewed. Participant characteristics are summarised in Table 1.

Analysis of the transcripts resulted in the identification of four main themes. The first relates to lunchbox decisions mothers made that were not focused on nutrition. The second relates to dietary choices, nutrition and food their children liked. The third theme, parental judgement, included mothers judging themselves and the judgment they perceived from others. The final theme was the support mothers received from their children's school in relation to the food children consumed at school such as healthy eating guidelines.

3.2 | Barriers impacting food choices

Participants described several barriers that prevented them from packing lunchbox food for their children that they considered healthy and that their children would eat and enjoy. These barriers included

TABLE 1 Summary of participant information

	n (%)
Number of children	
1	2 (20)
2	5 (50)
3	3 (30)
Relationship status	
Single	5 (50)
Partnered	5 (50)
Employment status	
Full time	3 (30)
Part time	0
Student	3 (30)
Not currently employed	4 (40)
Income level based on tax	
High	3 (30)
Medium	0
Low	7 (70)
School	
Private	9 (90)
Public	1 (10)
Child with special needs	
Yes	2 (20)
No	8 (80)

financial constraints related to the purchase of foods their children were likely to eat, and a lack of time, especially for those who had employment responsibilities.

Participants described a variety of financial constraints that impacted the food choices they made for their children. Participants who were in receipt of government welfare payments and those who were single income families were especially prone to experiencing these constraints, with several stating that their income was insufficient to cover living costs and the purchase of healthy food.

It is not feasible for people on lower incomes to be actually providing fresh fruit and vegetables for their kids. (Mother, single, 2 children).

Participants described the ways they manage issues surrounding affordability of food. This included talking to their children about the cost of food, discussing the family's limited income, or by avoiding the topic all together.

I don't actually say I can't afford them very much ... they don't love it if I do ever mention that we're not super rich, or that they might be missing out on things compared to their friends. (Mother, single, 2 children).

Participants found other ways to manage their financial constraints to ensure they could purchase enough food for their family. This included buying generic brands of foods, buying some staple food in bulk and cooking some, or all of their meals at home.

I'd rather buy a large amount of something, um and you can also, yeah manage I guess the money a bit better. (Mother, single, 1 child).

All participants reported that a lack of time impacted the food they packed in their children's lunchboxes. Some mothers managed these time constraints by buying online to minimise time spent shopping, preparing lunchboxes early or around work schedules. Other mothers said that they were so busy in the morning that if they were not organised, occasionally they forgot to pack a lunchbox.

It's more time for me, like I feel like I don't have much time or time to plan or think about it and much time to prepare it's very much like and sometimes it's like wow we're running out the door and I forgot to pack the lunchbox. (Mother, single, 1 child).

Mothers who were not in the formal workforce reported having more time to prepare food. The participants commented that this saved money, allowed them to make food they considered healthy and avoid pre-packaged or other purchased foods.

If I was a single mother working full time, I don't know how I would do big cook ups over school holidays if I'm constantly working. I wouldn't have the time to do that. (Mother, single, 2 children).

By contrast, mothers who were working full-time or studying did not think it was possible for them to make all the lunchbox food themselves. While these mothers were more likely to purchase pre-packaged food, they stated a desire to be more involved in household food preparation.

If I could do it myself and have more time to do that and make lovely little things for them that would be nice but it's, it's not possible not with three of them and working full time. (Mother, single, 3 children).

3.3 | Dietary issues and nutrition

Participants considered children's dietary intake and nutrition to be one of the most important aspects of lunchbox preparation. However, when discussing these issues, mothers also described how they attempted to balance healthy lunchboxes with their children's food preferences.

All mothers described the importance of sending their children to school with food that was nutritious and gave them energy to get through the day, in addition to ensuring that the food provided was something that their children would enjoy and eat.

I guess it's a constant battle between trying to fill them up ... but also, I'm conscious that ideally, quite a lot of the lunchbox should be fruit and vegetables. (Mother, single, 2 children).

Mothers were concerned that if their children did not like the food in their lunchbox, they would not eat it and the food would be wasted or the child would come home hungry.

If he doesn't eat, he's mental. He's hangry, really hangry ... but he'll come out of school, and you can tell like he needs to eat. (Mother, partnered, 2 children).

Mothers were more likely to worry about their children going hungry if they considered their children to be picky eaters. The concern was not that there was not enough food, rather that children were not eating food they did not like. Eight participants reported concerns around picky eating, including the two mothers who had children with special needs. For six of the mothers, pickiness was managed by understanding their children's preferences, for example only making sandwiches in the morning because their children wanted them fresh. But for the mothers who had children with special needs, for example ADHD or autism, managing their children's picky eating was important in ensuring that their children would not refuse to eat.

He could only eat the foods that were safe for him otherwise he wouldn't eat at all. And we had to go through

that for a really long time, where he just didn't eat at all. (Mother, single, 2 children).

All mothers wanted to ensure that their children had a healthy diet and were taught the skills to make healthy dietary choices as they grew up. Some of the mothers discussed the importance of nutrition with their children or got them involved in lunchbox preparation. This was especially important for mothers who had older children.

As they've gotten older, I've tried to get them to do all of the other things apart from the sandwich. They need to take a bit of responsibility for themselves and take it within themselves to eat. (Mother, single, 3 children).

3.4 | Parental judgement

Participants raised concerns about the content of their children's lunchboxes being connected to experiences of judgement. This included mothers judging themselves and other mothers or schools judging them for the food they packed for their children.

Children's dietary intake is a sensitive topic and many mothers judged themselves for a perception that they were falling short in their efforts to pack lunchboxes for their children.

I put a lot of effort into my kids' lunches and making sure they're healthy and that they like them and they're interesting. But there's always more that you could be putting in, I guess. (Mother, single, 2 children).

Mothers who reported their children were very picky eaters tended to blame themselves, stating that they were concerned they had not done enough to encourage healthy eating.

> But my kid don't eat that ... It is because ... I didn't give her chance to try this food ... maybe it just is, maybe my, um my issue. (Mother, partnered, 1 child).

Mothers reported past experiences when they felt their children's lunchbox was used to judge the quality of their mothering. Two of the participants spoke about attending meetings with their children's kindergarten teacher to discuss the food they had packed. This was an upsetting experience for these mothers who felt the quality of their mothering was being judged and made them nervous about preparing lunchboxes for their children when they started primary school.

It wasn't great, I mean especially because it wasn't, it wasn't just a choice that, um that could be easily fixed if that makes sense. (Mother, single, 2 children).

Further, experiencing this judgement could have a long-term impact on their lunchbox choices.

I got this very detailed email and speaking to when I went to pick her up about not having lollies in the lunchbox ... so, from then on, I've always had to be very strict. (Mother, single, 2 children).

Some mothers felt the judgement was about what they were able to afford for their children rather than the nutritional content of the lunchbox.

It's not so much towards what your kids are eating um, but I think it's more the judgment of why don't you have enough money ... Why not just buy it and I'm like well it works out cheaper for me and they're like why don't you work some more. (Mother, single, 2 children).

None of the mothers interviewed had been contacted about the food in their children's lunchboxes by their children's primary school, but it was something that mothers had heard about happening at other schools and worried about.

I hear about other places where letters go home to the mothers saying you know, and the food comes back saying this isn't acceptable and stuff like that. (Mother, partnered, 3 children).

Social media use and the associated opportunities for parental judgment were also discussed. Social media use was a complex issue, three of the mothers interviewed used social media in some form for lunch-box preparation and all felt it could be beneficial.

I can find a lot, um some ideas from YouTube ... mums that offer some ideas on um how to deal with the kids when they are fussy with food. (Mother, partnered, 1 child).

However, the women also stated that it could be detrimental to their emotional wellbeing if the food they made did not turn out the same as it did on social media because they would feel inadequate and not the best mother they could and/or wanted to be.

You feel a little, um, anxious because what they have done is so perfect ... but when I, when I tried to do it, it's not exactly the same, or maybe it's a little bit ugly. (Mother, partnered, 1 child).

Mothers stated that the impact social media had on them depended on the mood they were in.

I think it depends on the mother, because sometimes I've looked at them and I'm just like wow, I'd love to be able to do something like that and that motivates ... But then I feel like if I was in a bit of a slump, and I saw that I'd be like oh

my god I'm failing at lunchboxes ... as with everything social media, it can be either good or bad. Depends on what sort of mood you're in. (Mother, single, 2 children).

Some of the mothers who did not use social media thought the pages about lunchbox preparation were not about preparing food for children, rather a place where mothers could present themselves as mothers who were in line with social expectations.

So, there's like lunch box ideas and lunchbox mums and um they are definitely competing with each other ... it's not even about the kids, it's about the mums (laughs). (Mother, single, 2 children).

Overall, participants were confident in their nutritional knowledge and felt they knew what foods their children should be eating. Three mothers expressed a keen interest in nutrition and had undertaken forms of higher education related to nutrition after their children were born. They were surprised other mothers they know did not seem as interested. These mothers described the foods their children's friends were eating at school and their shock that mothers would pack foods they considered unhealthy in their child's lunchbox. This highlighted that even mothers who feared judgement would still question the food choices of other mothers.

It does really surprise me, the lack of knowledge. Um things that people think are healthy like oh, but corn chips have corn in them so it's almost a vegetable. And no, no it's not. (Mother, partnered, 3 children).

3.5 | Support from the school

None of the children of mothers interviewed were enrolled in a school that enforced lunchbox guidelines. Four mothers received information about healthy lunchbox items when their child began primary school, but these were suggestions rather than enforced rules.

It's quite a relaxed school I guess in terms of rules and guidelines. Um I think there was something in a welcome pack and it just suggested that you know, it be healthy, that you give fruit. (Mother, single, 1 child).

Participants stated that they felt this was because the school was worried mothers would react negatively to enforced guidelines.

It seems like quite a battle, and I think my son's school has just gone, you know, we're going to make suggestions but we're not willing to go in for the fight. (Mother, partnered, 3 children).

However, participants were surprised at the lack of guidelines at their children's school as they expected them to be enforced in the same way they were at kindergarten.

In kindy, they're very big about, you know not having any packaged food, not having any processed foods, not having um any baked treats, um yeah very strict on lunchbox guidelines at kindy...they don't really care at primary school. (Mother, single, 2 children).

Three mothers said the school had requested they not send nuts to school because of allergy concerns and to avoid pre-packed foods because they were not considered healthy, but these were not enforced policies.

It was kind of a suggestion not to bring nuts ... but that's not like strictly enforced it's like a suggestion. (Mother, single, 1 child).

Some participants wished the school did more to encourage healthy food choices, such as moving away from fundraisers based around lollies and cakes.

We should be normalising that you eat well, not normalising that you buy junk food to raise money. (Mother, partnered, 2 children).

4 | DISCUSSION

Findings from this study suggest that when preparing lunchboxes, mothers manage both food choices and maximising nutrition. While previous studies have reported on interventions that seek to improve the nutritional knowledge of mothers, 24,25 this study found that in general, the participants were confident in their own nutritional knowledge. This finding may shed some light on the limited success of previous interventions that aimed to improve lunchbox quality through nutritional education programs.^{24,25} Both Evans et al,²⁴ and Zask et al.²⁵ conducted school-based interventions that sought to improve the nutritional content of children's lunchboxes via parental education. These interventions led to an 11% increase in the number of children provided fresh produce,²⁴ and an increase of 0.63 serves of fresh produce in each child's lunchbox.²⁵ Similarly, a recent systematic review of 10 school-based interventions found that most interventions focused on providing nutritional information to mothers, which resulted in minimal changes in children's dietary intake.²⁶

Participants in this study were interested in maximising the nutritional content of their children's lunchboxes but were often hindered by non-nutritional barriers. Saving time and money at the expense of nutrition is a finding consistent with extant literature. However, research on lunchbox content has generally only focused on what mothers are packing in children's lunchboxes rather than the reasons for mother's lunchbox choices. Previous cross-sectional studies have explored the types of foods mothers pack in their children's lunchboxes over a set number of days. Sutter et al, did ask mothers what motivated lunchbox choices but only in a short survey and did not explore parental views on lunchbox choices. Furthermore,

Sanigorski et al,⁹ recorded child lunchbox content without exploring mothers motivations at all.

Our study found that cost and time barriers had an inverse relationship. Mothers who reported having a lack of time were less concerned about financial constraints, and those who reported financial constraints appeared to have more time, this may be due to their employment status. Those who were employed full-time reported having the least amount of time to prepare lunchboxes, and those who were currently not in the paid workforce or who were studying reported having more time to make food. This is consistent with previous studies that found parents who came from households with higher levels of employment are generally more impacted by time barriers, compared to those in lower income households, who are generally more impacted by financial constraints.^{27,28}

None of the mothers had children attending schools with enforced lunchbox guidelines. This is not a surprise, as Victorian schools are not required to enforce healthy eating policies. ²⁹ About half of the mothers received healthy lunchbox information when their children started school, while others were provided no information at all. Some schools made suggestions on the types of foods to pack or avoid, but these were not enforced rules. Overall, mothers were supportive of their school not having strict lunchbox guidelines. These findings support the current literature that indicates parental dislike of enforced food policies. ^{15,17} Enforced school lunchbox guidelines are often viewed as too strict and can lead to conflict between mothers and teachers. ¹⁸

While there are clear findings surrounding the nutrition related motivations of mothers, lunchbox preparation is not solely based on nutrition. It involves a strong emotional response and given children's lunchboxes can be considered a public display of mothering, the anxiety attached to them is understandable. The pressure to live up to the ideals of "good mothering," drawing on the work of Hays, 12 is often inescapable and pervasive enough to impact mothers across various population groups. 12,13,15,19 All the mothers in this study discussed the pressures associated with lunchbox preparation. The mothers felt the pressure to live up to the ideals of good mothering, 11,12 even if they did not personally believe in these expectations, or were unable to live up to them due to their own personal circumstances. The impact of social media on mother guilt and views on lunchbox preparation cannot be overstated. 30,31 Social media can be used as a tool to display adherence to the principles associated with good mothering and pressure other mothers to live up to social expectations. 12,17 When discussing pressures associated with lunchbox preparation, several participants described the negative influence of social media. Objectively, participants understood that these lunchboxes were designed to be placed on social media, yet the idea other children had these lunchboxes and their children did not, could lead to feelings of inadequacy. Some mothers stated they specifically avoided using social media because they knew it would negatively impact them. While social media is a relatively new phenomenon, it has been found to increase rates of anxiety and stress in various populations, including mothers. 30,31 The findings of this study suggest using social media for lunchbox ideas may increase the expectations mothers put on

themselves when it comes to child nutrition and exacerbate feelings of guilt and shame, which is in line with previous research that has explored social media and mothering. ^{30,31}

Children's dietary intake is seen as a mothers' responsibility, and the lunchboxes they pack are seen as an example of how they live up to the ideals of intensive mothering. 12,17 However, schools are considered responsible for children's education, including education on healthy eating and nutrition. While mothers do not want lunchbox rules enforced by schools, there remains a community expectation that schools will play a role in improving children's dietary intake. However, the non-nutritional concerns that impact mother's lunchbox choices also impact how they view nutritional information provided by schools. The pressure to live up to the ideals of good mothering mean mothers may view nutritional information provided by schools as a judgment rather than advice. 15 Even if the suggestions are not enforced, they can still be viewed by mothers as schools overstepping their responsibilities. This ambiguity of the school's role in child nutrition can inadvertently lead to an adversarial relationship between mothers and schools.

The focus for mothers when preparing lunchboxes is nutrition, but the drivers of their food choices are not related to nutrition. On the surface, lunchboxes appear to be straightforward, mothers pack food for their children to take to school. However, as this study shows, this area of mothering is complex. All mothers interviewed struggled with their children's food choices, even when faced with non-nutritional barriers that were outside of their control. This internalised guilt and pressure to always be better is a key part of Hay's concept of good mothering. 11,12 An example of the social expectation that mothers are solely responsible for their children's care is reflected in the study sample itself, all the participants interviewed were mothers, despite the study being open to all caregivers. Additionally, when discussing lunchbox preparation, partnered mothers did not discuss their children's father's involvement in lunchbox preparation at all. This absence of fathers in responsibilities related to child nutrition has been discussed in previous research, which consistently finds that society views childhood nutrition as the mother's responsibility. 11,13,15

5 | IMPLICATIONS FOR HEALTH PROMOTION

Childhood is a time of significant physical and mental growth, hence adequate nutrition is vital. Research indicates that the eating habits developed in childhood continue into adulthood and can impact health in the long-term. 1,3,32,33 As such, improving children's nutritional intake is a key area of focus for health promotion interventions. Australian primary school children spend most of their time outside of home at school, so it is considered an ideal environment for health promotion. 5,26

The predominant focus of current health promotion interventions seeking to improve the content of children's lunchboxes has emphasised parental education. Most children bring a packed lunch from home, which is why previous interventions have focused on mothers as they are typically responsible for packing lunchboxes.^{5,8} Yet, the focus on nutritional education has had limited impact, with most children eating less than one serve of vegetables while at school and only half consuming fruit.³³ This is the first Victorian study to explore mothers' perceptions around lunchbox preparation. The findings suggest mothers consider themselves to be well informed about the importance of nutrition, and they attempt to balance this knowledge with other practical concerns such as cost, time and child preferences. The findings of this study indicate that mothers consider lunchboxes to be a public display of their parenting, and fear judgement as they try to adhere to social expectations surrounding child nutrition while also dealing with the practical realities of feeding their children. In addition to focusing on providing parents with nutritional education materials, future health promotion interventions should also consider focusing on addressing non-nutritional barriers such as cost concerns and time constraints. There is also clearly a role for fathers and other caregivers when considering responsibility for children's nutritional needs. Future interventions could seek to increase their participation in their children's dietary intake, in addition to emphasising the role of the mother.

6 | STRENGTHS AND LIMITATIONS

This research has provided valuable insight into a poorly understood phenomenon, and in doing so, adds to the existing literature. While there are several important findings of this study, this research also needs to be considered in the context of its limitations. The results of this study are strengthened by the chosen methodology, which allowed participants to discuss their experiences in their own words. 20 While the small sample size is a limitation, given the paucity of research that has been conducted on this topic, the results of this study are important and can therefore aid future research. Another potential limitation is that all the participants were mothers, this is consistent with previous research that indicates mothers are generally responsible for packing children's lunchboxes. 34 However, other caregivers may have different experiences, and this could be an important population to investigate in future research. The mothers interviewed also had a similar cultural background, so it is possible parents from other cultures may have different perspectives on lunchbox preparation. Despite this similarity in cultural backgrounds, the final sample included mothers from different income groups, single parents and parents who had children with special needs. Given the lack of research in this area, these results provide a good foundation for future research.

7 | CONCLUSION

This is the first qualitative study conducted in Victoria on parental views on lunchbox preparation, and mothers' experiences preparing lunchboxes for their children. It highlights that schools manage

concerns with children's dietary intake in different ways, but generally stop short of enforcing any strict rules on the foods children can bring to school. The findings indicate that mothers are confident in their nutritional knowledge but are hindered by non-nutritional barriers when it comes to packing lunchboxes that they consider healthy. This study also explored how lunchbox preparation relates to pressures around notions of good mothering and can impact mothers' perceptions of nutrition information provided by schools or on social media. Currently, Australian children's diets do not provide adequate nutrition, putting them at risk of poor health outcomes. Although the sample size was small, the results of this study provide a basis of how this area can be further examined through qualitative research and could form a foundation for future research. Further research on this topic. including longitudinal studies on lunchbox choices and the impact of social expectations related to good mothering, could potentially improve children's dietary intake now and into the future.

AUTHOR CONTRIBUTIONS

Kimberley Watson-Mackie developed the research plan, conducted data collection, analysed the results and compiled the results in her honours thesis which formed the basis of this article. Fiona McKay developed the aims of the project, developed the ethics application prior to Kimberley Watson-Mackie involvement in the project. Assisted Kimberley Watson-Mackie with the development of the literature review, research plan, implementation of the intervention, data analysis and write up of the results. Hayley Mckenzie developed the aims of the project, developed the ethics application prior to Kimberley Watson-Mackie involvement in the project. Assisted Kimberley Watson-Mackie with the development of the literature review, research plan, implementation of the intervention, data analysis and write up of the results. All authors contributed to the writing of this article and critical revision for intellectual content. All authors read and approved the final manuscript.

ACKNOWLEDGEMENTS

The authors would like to thank the participants in the study for so generously sharing their perspectives on lunchbox preparation and their experiences of packing lunchboxes for their children. Open access publishing facilitated by Deakin University, as part of the Wiley - Deakin University agreement via the Council of Australian University Librarians.

FUNDING INFORMATION

This work was supported by Deakin University and the honours course which includes funding for students.

CONFLICT OF INTEREST

All authors declare they have no potential conflicts of interests.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ETHICS STATEMENT

The Deakin University Human Research Ethics Committee granted ethical approval for this research (2021-031). This study was conducted according to the guidelines laid down in the National Statement on Ethical Conduct in Human Research and all procedures involving research study. Written informed consent for data to be collected and published was obtained from all participants.

ORCID

Kimberley Watson-Mackie https://orcid.org/0000-0003-4100-2128 Hayley McKenzie https://orcid.org/0000-0002-9871-3740 Fiona McKay https://orcid.org/0000-0002-0498-3572

REFERENCES

- NHMRC. Australian dietary guidelines. Canberra: National Health and Medical Research Council; 2013.
- Australian Institute of Health and Welfare. Children's headline indicators. Canberra: Australian Government: 2018.
- Australian Institute of Health and Welfare. Australia's children. Canberra: Australian Government; 2020.
- State Government of Victoria. Pick'n'Mix 1-6. Melbourne: State Government of Victoria; 2020 [cited 2022 Sept 30]. Available from: https://heas.health.vic.gov.au/schools/healthy-lunchboxes
- Hagerman CJ, Ferrer RA, Klein WMP, Persky S. Association of parental guilt with harmful versus healthful eating and feeding from a virtual reality buffet. Health Psychol. 2020;39(3):199–208.
- Bathgate K, Begley A. 'It's very hard to find what to put in the kid's lunch': What Perth parents think about food for school lunch boxes. Nutr Diet. 2011;68(1):21-6.
- 7. Harman V, Cappellini B. Mothers on display: Lunchboxes, social class and moral accountability. Sociology. 2015;49(4):764–81.
- 8. Mihrshahi S, Myton R, Partridge SR, Esdaile E, Hardy LL, Gale J. Sustained low consumption of fruit and vegetables in Australian children: Findings from the Australian National Health Surveys. Health Promot J Austr. 2019;30(1):83–7.
- Sanigorski AM, Bell AC, Kremer PJ, Swinburn BA. Lunchbox contents of Australian school children: Room for improvement. Eur J Clin Nutr. 2005;59(11):1310-6.
- Sutter C, Taylor JC, Nishina A, Ontai LL. Parental and family predictors of fruits and vegetables in elementary school children's home-packed lunches across a school week. Appetite. 2019;133: 423-32
- 11. Faircloth C. When equal partners become unequal parents: Couple relationships and intensive parenting culture. Fam Relationsh Soc. 2021;10(2):231–48.
- Hays S. The cultural contradictions of motherhood. New Haven: Yale University Press: 1996.
- Henderson A, Harmon S, Newman H. The price mothers pay, even when they are not buying it: Mental health consequences of idealized motherhood. Sex Roles. 2015;74(11–12):512–26.
- Goodwin S, Huppatz K. The good mother: Contemporary motherhoods in Australia. Sydney: Sydney University Press; 2010.
- Maher J, Wright J, Tanner C. Responsibility and resistance: Women negotiating the nourishment of children. Fam Relationsh Soc. 2013; 2(2):193–209.
- Pike J, Leahy D. School food and the pedagogies of parenting. Austral J Adult Learn. 2012;52(3):435–59.
- Harman V, Cappellini B. Unpacking fun food and children's leisure: Mothers' perspectives on preparing lunchboxes. Young Consum. 2014;15(4):312-22.

- Karrebaek MS. "What's in your lunch box today?": Health, respectability, and ethnicity in the primary classroom. J Linguist Anthropol. 2012;22(1):1–22.
- O'Brien KM, Yoo S-K, Kim YH, Cho Y, Salahuddin NM. The good mothering expectations scale: An international instrument development study. Counsel Psychol. 2020;48(2):162–90.
- Charmaz K. Constructing grounded theory: A practical guide through qualitative analysis. 1st ed. ProQuest Ebook Central: Sage Publications; 2006. p. 208.
- Charmaz K. The power of constructivist grounded theory for critical inquiry. Qualit Inq. 2016;23(1):34–45.
- Barenfeld E, Ali L, Wallstrom S, Fors A, Ekman I. Becoming more of an insider: A grounded theory study on patients' experience of a personcentred e-health intervention. PLoS One. 2020;15(11):e0241801.
- Durosini I, Savioni L, Triberti S, Guiddi P, Pravettoni G. The motivation journey: A grounded theory study on female cancer survivors' experience of a psychological intervention for quality of life. Int J Environ Res Public Health. 2021;18(3):950.
- Evans CE, Greenwood DC, Thomas JD, Cleghorn CL, Kitchen MS, Cade JE. SMART lunch box intervention to improve the food and nutrient content of children's packed lunches: UK wide cluster randomised controlled trial. J Epidemiol Community Health. 2010;64(11):970-6.
- Zask AAJ, Brooks LO, Hughes DF. Tooty fruity vegie: An obesity prevention intervention evaluation in Australian preschools. Health Promot J Austr. 2012;23:10–5.
- Nathan N, Janssen L, Sutherland R, Hodder RK, Evans CEL, Booth D, et al. The effectiveness of lunchbox interventions on improving the foods and beverages packed and consumed by children at centrebased care or school: A systematic review and meta-analysis. Int J Behav Nutr Phys Act. 2019;16(1):38.
- 27. Rustad C, Smith C. A short-term intervention improves nutrition attitudes in low-income women through nutrition education relating to financial savvy. J Hunger Environ Nutr. 2012;7(2–3):205–23.
- Wills WB-MK, Roberts M, Lawton J. The framing of social class distinctions through family food and eating practices. Sociol Rev. 2011; 59(4):725–40.
- Rosewarne E, Hoek AC, Sacks G, Wolfenden L, Wu J, Reimers J, et al. A comprehensive overview and qualitative analysis of government-led nutrition policies in Australian institutions. BMC Public Health. 2020;20(1):1038.
- Amaro LM, Joseph NT, de los Santos TM. Relationships of online social comparison and parenting satisfaction among new mothers: The mediating roles of belonging and emotion. J Fam Commun. 2019; 19(2):144–56.
- Tosun LP, Ozturk A, Ozdemir G. Mother to mother: Mothers' social comparison-based emotions on social networking sites. Eur J Psychol. 2020;16(4):602–18.
- 32. Foodbank Australia. Foodbank hunger report 2020: Food insecurity in the time of COVID-19. Yarraville: Foodbank Australia; 2020.
- Australian Institute of Health and Welfare. Nutrition across the life stages. Canberra: Australian Government; 2018.
- 34. Craig L, Churchill B. Working and caring at home: Gender differences in the effects of COVID-19 on paid and unpaid labor in Australia. Feminist Econ. 2020;27(1–2):310–26.

How to cite this article: Watson-Mackie K, McKenzie H, McKay F. Are mothers under lunchbox pressure? An exploration of the experiences of Victorian mothers preparing lunchboxes for their children. Health Promot J Austral. 2023; 34(1):91–9. https://doi.org/10.1002/hpja.681